

Best Management Practices for Construction and Development Projects Running Buffalo Clover

Trifolium stoloniferum

Common name • Running Buffalo Clover Scientific name • *Trifolium stoloniferum* Federal status • Endangered State status • Endangered

Purpose and Use

The information in this document is to be used to help avoid and minimize species impacts due to construction practices. It is not intended as a guide to manage habitat for a given species. Please contact the Department of Conservation if habitat management information is needed. Because every project and location differ, following the recommendations in this document does not guarantee impacts will not occur to the species and additional information may be required in certain instances. Following the recommendations in this document does not complete Endangered Species Act consultation that may be necessary for species listed under the federal Endangered Species Act; please contact the U.S. Fish and Wildlife Service for more information.

Ecology

Running Buffalo Clover was historically widespread from Kansas to West Virginia. In Missouri, Running Buffalo Clover has recently been found in three natural sites and has been reintroduced at a number of sites. The plant favors moist, open woodlands and stream banks. It grows in areas that have a pattern of long-term moderate disturbance such as mowing, trampling, or grazing.

Reasons for Decline

Running Buffalo Clover may have depended on bison to maintain its moderately disturbed habitat, as well as to scarify and disperse seeds. As bison were eliminated, so was suitable habitat and a means of seed dispersal. Other historical causes of decline may include habitat destruction, increased competition from exotic plants, and reduced fire frequency resulting in loss of open woodlands. Running Buffalo Clover is currently threatened by habitat loss, population isolation, competition from non-native plants, and excessive grazing.

Specific Recommendations

 Project activity in the vicinity of known Running Buffalo Clover sites should be consistent with the maintenance of open woodland habitat.

- Moderate disturbances such as prescribed fire and grazing should be allowed to continue to maintain suitable habitat.
- Do not use any herbicides at Running Buffalo Clover sites unless all of the clover plants are located, and spot spraying can be conducted without contacting the clover.
- Selective harvest of timber is acceptable if clover plants are protected from physical destruction and a partial tree canopy is maintained.
- Do not mow or otherwise disrupt plants during the period of sexual reproduction (April through August).

General Recommendations

If your project involves the use of Federal Highway Administration transportation funds, these recommendations may not fulfill all contract requirements. Please contact the Missouri Department of Transportation at 573-526-4778 or the Missouri Department of Transportation Environmental Studies webpage for additional information on recommendations.

Information Contacts

For further information regarding regulations for development in rivers and streams, contact:

For species information:

Missouri Department of Conservation

Science Branch P.O. Box 180 Jefferson City, MO 65102-0180 Telephone: 573-751-4115

For species information and Endangered Species Act Coordination:

U.S. Fish and Wildlife Service
Ecological Services
101 Park Deville Drive, Suite A

Columbia, MO 65203-0007 Telephone: 573-234-2132

For Clean Water Act Coordination:

Missouri Department of Natural Resources

Water Protection Program
P.O. Box 176
Jefferson City, MO 65102-0176
Telephone: 573-751-1300, 800-361-4827

U.S. Army Corps of Engineers

Regulatory Branch 700 Federal Building Kansas City, MO 64106-2896 Telephone: 816-389-3990

U.S. Environmental Protection Agency

EPA Region 7 Water Division 11201 Renner Boulevard Lenexa, KS 66219 Telephone: 913-551-7977

Disclaimer

These Best Management Practices were prepared by the Missouri Department of Conservation with assistance from state and federal agencies, contractors, and others to provide guidance to those who wish to voluntarily act to protect wildlife and habitat. Compliance with these Best Management Practices is not required by the Missouri wildlife and forestry law nor by any regulation of the Missouri Conservation Commission. Federal laws such as the Clean Water Act and the Endangered Species Act, and state or Local laws need to be considered for construction and development projects and require permits and/or consultation with the appropriate agency. Following the recommendations provided in this document will help reduce and avoid project impacts to the species, but impacts may still occur. Please contact the appropriate agency for further coordination and to complete compliance requirements.